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ABSTRACT

This project was organized in an attempt to provide local schools and school districts with the best available information regarding slow learners in secondary school mathematics. The information was disseminated through two workshop conferences (spring and summer), a newsletter, and follow-up field visits to the participating school districts. The focus of this evaluation was to assess the extent to which participants were satisfied with the workshop experiences and to determine the components of the participants' satisfaction with the workshop and conference. (MP)

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ALTERNATIVES for slow learners in secondary school MATHEMATICS

QUEENS COLLEGE OF THE CUNY. HERBERT FREMONT, DIRECTOR. NSF GRANT NO. SER 77-20597

SE 027 949

ALTERNATIVES FOR SLOW LEARNERS IN SECONDARY SCHOOL MATH

QUEENS COLLEGE

RESEARCH FOUNDATION OF CUNY

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NSF GRANT NO. SER 77-20587

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NARRATIVE

This project was organized in an attempt to provide local schools and school districts with the best available information regarding slow learners in secondary school mathematics.

The information was disseminated through two workshop conferences (spring and summer), a newsletter, and follow-up field visits to the participating school districts. Ten participating schools and school districts were selected and each was represented by a team of participants including an administrator, a mathematics supervisor and a key mathematics teacher.

The participants selected consisted of 10 teams of 3 people each. There were 8 secondary school mathematics teachers, 5 mathematics chairmen, 7 district mathematics coordinators, 6 assistant principals, 3 principals, and 1 assistant superintendent; thirty people in all, making up the list of participants. There was widespread interest in the New York Metropolitan 3 county area (Queens, Nassau and Suffolk) in participating in the project and the ten selected schools and districts were chosen from 34 applicants. Three New York City Queens school districts, 3 Nassau County districts and 4 districts from Suffolk County were selected.

The beginning spring conference took the participants away from their school districts for 2 nights and 3 days and was highly successful. (See evaluation section.) It focused upon prominent improvement programs for slow learners in math. Guest speakers came from the Denver University, the Baltimore County Schools, and the Oakland County Schools in Michigan. These speakers conducted "hands-on" workshops as they provided typical experiences from their programs for our participants. The overnight aspect of the conference also enabled participants and guest speakers to informally meet and discuss common problems. Meetings were also held by job title: administrators,

math supervisors, teachers; as time was provided for an exchange of ideas and concerns. The conference was concluded with a luncheon address by Professor Max Sobel. It was an intensive early morning to evening experience in teaching slow learners mathematics in secondary schools. This conference was followed with a 2-day drive-in conference during the summer held at Queens College in late August, shortly before the reopening of the schools in September. This conference was also highly effective in dissemination of information and highlighted particular problems in teaching math to slow learners, such as diagnostic techniques. Workshops were conducted by guest speakers focusing upon the use of hand calculators and the development of problem-solving ability. In addition, the project director conducted a workshop on motivational techniques and an exchange workshop was held where the participants shared with each other some of their own favorite activities. Job-title meetings were also held and rounded out this two-day conference.

A quarterly Newsletter, The Mathematics Learning Exchange, was begun to provide participants with a continuous flow of information regarding programs and problems, and served as a means of communication between participants. (See sample copy in appendix.)

In order to encourage implementation of the information disseminated, follow-up field visits were made to participating school districts by the project director and visiting consultant, completing all of the activities of this information dissemination program.

OUTCOMES

The association, through the varied activities of this program, between Queens College staff and public school teachers, supervisors and administrators was a productive one. A very specific positive result was the organization of

the participating school districts into a loose consortium called "The Ten Schools Coalition." Because of a strong desire to continue the relationship begun by the overnight Spring Conference, the participants suggested that they form a coalition to meet their specific needs. To this end, the Ten Schools Coalition, working together with the project director, organized and conducted a one-day conference focusing upon the New York State Regents Competency Examination. A total of about 60 educators were present for the lectures and workshops featuring a keynote speaker from the Bureau of Mathematics of the New York State Department of Education. The effective area of influence of the dissemination program was increased dramatically as the conference was attended by many teachers and supervisors in addition to the program participants. An interesting and productive spirit of cooperation between the participating schools and school districts was enhanced.

There were some unexpected problems encountered that were of significance. A surprising number of school district administrators and supervisors were reluctant to participate in the field visit aspect of the program. The visiting consultant had responsibility for visiting five school districts and had difficulty arranging appointments at each one. The project director also had responsibility for visiting five districts and two of these proved virtually impossible to visit. One can only speculate as to the causes, but it seems clear that difficult financial problems are sapping the strength of school people and they are not anxious for their programs to be seen and feel it may be a burden to have visitors. In this respect, it seems that the project has not been successful in defining clearly the role of the visiting consultant to the participants. On those occasions when the project director did visit the schools, he was shown around as if he were a visiting dignitary rather than a consultant coming to provide services. Future programs will certainly take this into account.

Another problem encountered resulted in a change of visiting consultant. The visiting consultant had difficulty understanding his role in the total program and in the conferences in particular. The conferences were organized to present information without regard for the philosophical base of those involved. The visiting consultant, on the other hand, persisted in pursuing a particular point of view at the expense of a broad appeal. After discussion, a mutual agreement was made that allowed for replacement of the visiting consultant. The new consultant was equally strong in education and experience and more sympathetic to the stated goals of the program. Evidently the goals of the program need to be carefully clarified for all participating staff members.

RESULTS OF EVALUATION

Evaluation attempted to frame answers to two basic questions:

Is the model used in this program effective in getting the information to the participants? If it is, will the participants put the information into use in their schools? The first question is a great deal easier to respond to than the latter.

The focus of this evaluation was to assess the extent to which participants were satisfied with the workshop experiences and to determine the components of participants' satisfaction with the workshop and conference.

A Summary of Results and Conclusions

In general, participants were well satisfied with the workshops and the conference as a whole. Without exception the second (morning) sessions received higher satisfaction ratings than did the first (afternoon) sessions. Our data do not permit any firm conclusions regarding why such a pronounced (practice, sequence, recency, fatigue, or time-of-day?) effect should have occurred. The participants' evaluation profiles of the workshop leaders were generally elevated indicating a very positive view of the conference. There were very

few questions which teachers responded to differently than did supervisors or administrators. The differences observed were not dramatic in nature, generally they were approximately one scale point or less.

A more complex analysis of the overall conference evaluation reveals that three major clusters of elements accounted for the major sources of satisfaction obtained by the participants from the conference.

The overall evaluation of the conference was highly associated with both the setting in which the conference took place, and the experience of remaining together, as a team, for the duration of the conference. The participants distinguished between aspects of the conference under direct administrative control and those features that were only more remotely related to administrative control. In addition, the availability of resource personnel was associated with participants' overall satisfaction with the program.

A second factor, unrelated to participants' overall evaluation of the workshop, but a source of satisfaction nonetheless, proceeded from interactions between and among consultants and participants.

A third factor involving the satisfaction of participants reflects a varying sense of ease in informal interchange, ease which was somewhat greater for administrators and supervisors than it was for teachers.

The free responses of participants to the questionnaire were congruent with the findings reported above. Fifteen of the 28 respondents added comments to the questionnaire. Four offered praise of selected aspects of the conference, its goal orientation, atmosphere, and the close focus upon the topic. Six made requests for more time to be spent on various elements of the program. Eight participants made suggestions for topics they would like to have seen included in the conference. Several of these suggestions have been adopted and will be made part of the summer portion of the program.

In general, the free responses can be divided into two categories: outright praise and requests for more of both time to work in more depth and additional topics to be covered. Both of these categories are reflective of an extremely successful enterprise.

Overall Spring Conference Evaluation

At the end of the last workshop session prior to the final gathering for luncheon which terminated the conference, a seven-item questionnaire was given to each of the conference participants. The first six items on the evaluation form were designed to determine the extent to which each of the components of the conference contributed to the overall success while the final item was an overall rating of the conference's success. The data indicate a favorable attitude towards the components of the conference and the conference in general on the part of each of the constituent groups. A question by question breakdown of the results follows. Each statement allowed for a nine-point scale response with 9 being the most positive response.

1. The conference took place during a school week rather than over a weekend or on a school holiday.

The mean response for all subjects was 7.71 with a median of 8.25. Administrators had the lowest mean score of 7.00 and supervisors the highest (8.22). Teachers and supervisors had equal median scores (8.59) with a median for administrators of 7.75.

2. The conference was removed from an institutional setting.

The mean for all subjects was 8.43. Administrators had the lowest mean of 8.25 and the teachers were high at 8.55. The median score for all groups was at or slightly above (less than 0.25) the mean for that group. All three groups gave this item the highest rating.

3. The participants remained together for the duration of the conference.

The mean for all subjects was 8.07 with the median at 8.5. Supervisors and administrators both rated this item as one of the two most positive items (mean = 8.3) but the mean rating given by teachers of 7.73 was one of that groups lowest ratings given an item.

4. A team consisting of a teacher, supervisor and administrator from the same district attended the conference.

The mean for all subjects was 8.17 with the teachers and supervisors having means slightly above the grand mean (8.27 and 8.33 respectively) and administrators being slightly below the grand mean at 7.88. The median score for all groups was between 8.38 (teachers) and 8.60 (supervisors).

5. Informal discussion sessions were held among conference participants.

Supervisors and Administrators indistinguishable in terms of their response to this item (7.89 and 7.88 respective means). Teachers, however, gave this item their lowest rating with a mean of 6.91.

6. Resource personnel were available.

All groups had virtually the same response to this item with the grand mean of 7.39, supervisors low at 7.33 and teachers high at 7.46. In terms of the mean rating for all subjects, this item received the lowest positive rating.

The final item was an overall evaluation of the conference. Again, on this item all three groups were almost indistinguishable. The mean for all subjects was 7.64 (median 7.85) with a very small spread of 0.17 between the low (supervisors 7.56) and the high (teachers = 7.73).

In addition to the seven items on the questionnaire participants were invited to make additional comments or suggestions for improving future conferences. Twenty-eight (28) people completed the questionnaires and eighteen (18) of these had some kind of written comment. Some individuals commented on only one area, others commented or suggested items in various areas. The

breakdown is given below. Numbers in parentheses following the category name indicate the total number of individuals who commented in that category. The items listed beneath the category heading indicate the specific area toward which a comment was directed.

A: General praise of the conference as worthwhile or looking forward to the follow-up with no additional comments (3).

B: Specific praise of conference items (4)

1. The goal orientation of the participants and the conference leaders.
2. The atmosphere and the conference setting.
3. The limited number of speakers on a central theme.

C: Suggested a need for reevaluating the apportionment of time throughout the conference (6).

1. More and longer informal discussion sessions.
2. More time for some of the speakers (Max Sobel cited specifically)
3. One afternoon for recreation.
4. Greater in-depth study of one particular program in all its aspects from initiation to evaluation.

D: Indicated topics which need inclusion in the program (8).

1. Use of calculators in the classroom
2. Problem solving approaches
3. Motivation
4. Self image of the students
5. Preparing classroom materials -- text materials
6. Nitty Gritty (classroom management)
7. Reading skills in the math area

CONFERENCE EVALUATION

CHECK ONE: Teacher _____ Supervisor . . . . . Administrator – – – –

DIRECTIONS: Consider the numbers on the rating scale as continuous with the description indicating direction. Circle only ONE number in response to each statement.

Indicate the extent to which each of the following characteristics of this conference contributed to the overall success of the conference.

1. The conference took place during a school week rather than over a weekend or during a school holiday.

1.....2.....3.....4.....5.....6.....7.....8.....9

2. The conference was removed from a school or institutional setting.

1.....2.....3.....4.....5.....6.....7.....8.....9

3. The participants remained together for the duration of the conference.

1.....2.....3.....4.....5.....6.....7.....8.....9

4. A team consisting of a teacher, supervisor and administrator from the same district attended the conference.

1.....2.....3.....4.....5.....6.....7.....8.....9

5. Informal discussion sessions were held among participants and consultants.

1.....2.....3.....4.....5.....6.....7.....8.....9

6. Resource personnel were available before and after the workshops.

1.....2.....3.....4.....5.....6.....7.....8.....9

Please give your overall evaluation of this conference.

1.....2.....3.....4.....5.....6.....7.....8.....9.

Evaluation of the Individual Workshop Sessions (Spring)

The conference had as major components four workshop sessions, each led by an individual with a great deal of experience in working with the slow learner in mathematics. In organizing the conference it was decided to divide the thirty participants into smaller groups for a more active workshop experience. As such, each workshop was presented twice with approximately half of the participants working in any workshop at a given time.

Each conference participant was asked to complete a twenty-item questionnaire to evaluate each of the workshop sessions. Each item on the questionnaire had a nine-point scale response with 1 representing the most positive response. Since participants were exposed to the workshops in different orders, order of presentation was considered in the analysis of the data obtained. The data collected from the participants rating the workshop sessions was tabulated using the SPSS package and descriptive statistics were generated. A profile of the ratings given each workshop leader was prepared indicating mean scores for the first and second sessions. In addition, summary profiles were prepared indicating Session I and Session II ratings combining all workshops and all participants. Finally a similar profile was prepared separating the ratings given by each of the three constituent groups (teachers, supervisors and administrators). The profiles for the individual workshop leaders are presented to the conference coordinators to give specific feedback in determining which of the presenters might be most beneficial in future conferences. The coordinators might also wish to provide each leader with their own profile as feedback to themselves. A statistical analysis of the mean scores for each leader appears in the appendix.

The combined groups summary of all workshop sessions profile seemed to corroborate the findings of the conference evaluation. All three constituent groups making up the conference, teachers, supervisors, and administrators, indicated favorable attitudes towards the workshop sessions as a whole. An interesting phenomenon was observed, however, when the data were graphed according to the order of presentation. The ratings given to the first presentation of all workshops (Session I) and the ratings given to the second presentation of all workshops (Session II), when plotted on uniform scales, resulted in almost parallel paths. This result was initially observed when all participants were considered together, however, the pattern remained the same when the three constituent groups were considered separately.

Observations from the graphs of Workshop Evaluation Ratings

1. Participants rated session II more positively than session I on all items.

2. Within session II, the paths representing each of the constituent groups intersect frequently. The groups tend to respond similarly to each statement with no group being more than 0.4 units from the total mean score on any one item.

3. Within session I, the paths of the graphs of supervisors and administrators intersect nine times and coincide five times indicating rather close agreement between these groups. The graph representing mean teacher ratings tends to be separate from these two with less positive ratings in all cases (10) except one.

4. None of the graphs representing session I intersect the graphs representing session II. They do in fact appear almost parallel, approaching each other in response to only one item. (#13 - My questions were dealt with satisfactorily.)

The results of tabulating all data on all workshop sessions yielded the following information:

The grand mean for all workshops, for all participants for all sessions

$\bar{X} = 3.46$ s.d. = 1.83

Separating the responses into Session I and Session II scores yields:

$\bar{X}_1 = 4.05$ $\bar{X}_2 = 2.87$

$s.d._1 = 1.98$ $s.d._2 = 1.66$

Reversing these scores so that they become comparable with the nine-point scale where nine represented the most positive rating as used in the overall conference evaluation, it is possible to observe the relative congruence between the workshop evaluations and the overall conference evaluation.

Session I	Session II	Total	Conference Evaluation
$\bar{X} = 5.95$	$\bar{X} = 7.13$	$\bar{X} = 6.54$	$\bar{X} = 7.64$

C

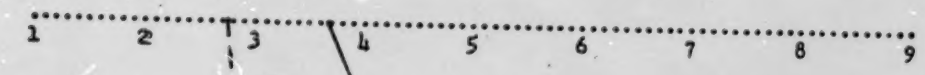
WORKSHOP SESSION EVALUATION

TITLE OF SESSION 1 ALL WORKSHOPS _____

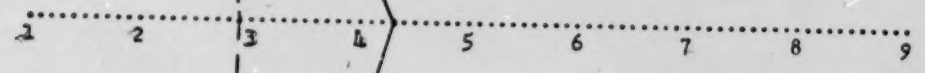
TITLE OF SESSION 2 ALL WORKSHOPS — — — —

CHECK ONE: Teacher_____ Supervisor_____ Administrator_____

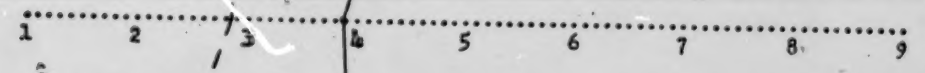
1. To what extent was this session related to the teaching concerns of teachers of slow learners?



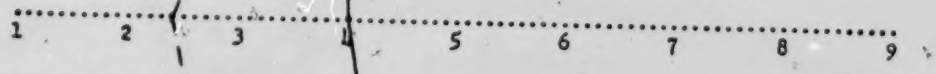
2. How interested would slow learners be in the material presented?



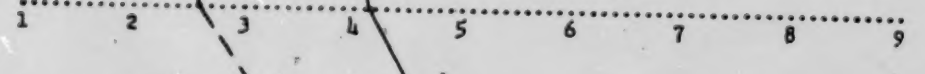
3. To what extent would slow learners be challenged by the material?



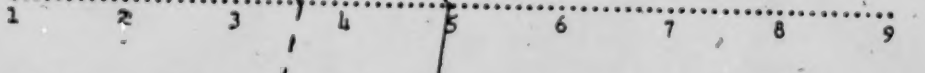
4. I feel that the material described would be useable by a classroom teacher of slow learners.



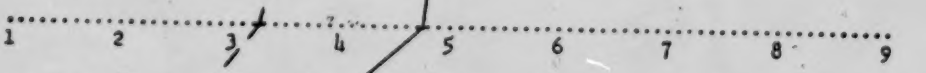
5. This session would be a worthwhile experience for others in my district.



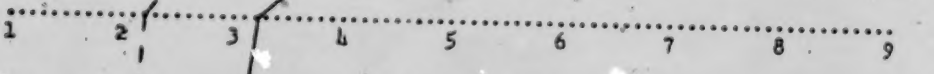
6. How well was time apportioned to this activity?



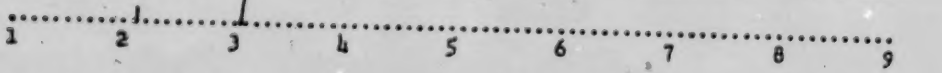
7. This session was the type I hoped I would attend at a conference dealing with alternatives for slow learners.



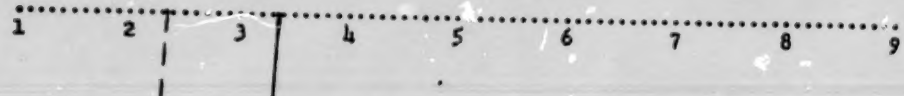
8. The presentation was well organized.



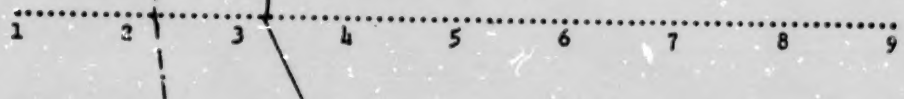
9. The speaker demonstrated the expertise I would expect from a workshop leader.



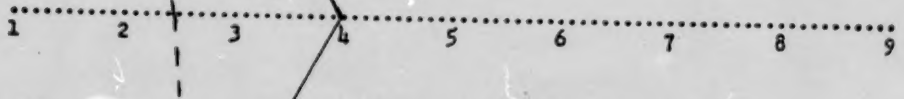
10. The speaker demonstrated the creativity I would expect from a leader in the field.



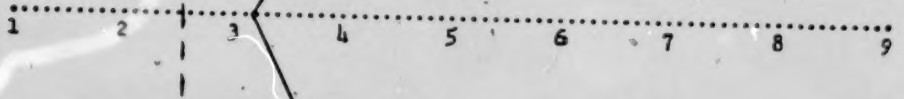
11. The speaker communicated his/her ideas well.



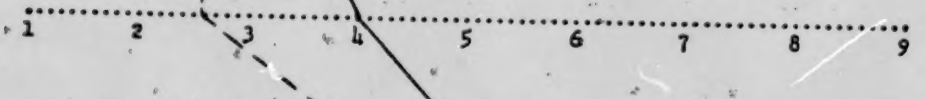
12. The session offered stimulating material.



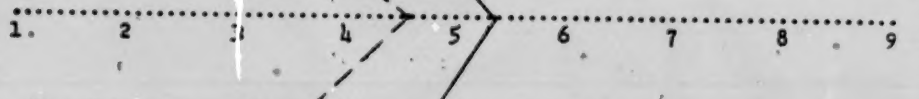
13. My questions were dealt with satisfactorily.



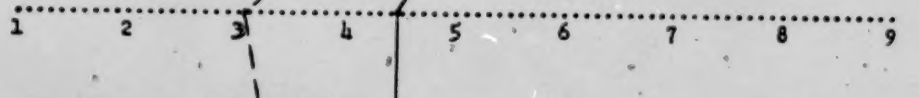
14. To what extent would the content of this session be of practical use for classrooms in your school (district)?



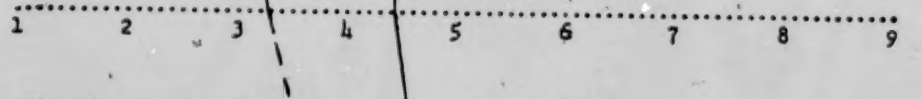
15. This session provided me with new understandings about the slow learner.



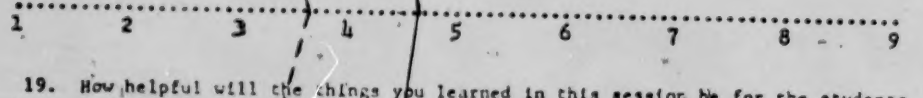
16. This session helped achieve the objectives of this conference.



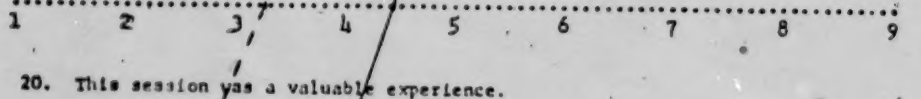
17. How successful was this session as a training experience for YOU?



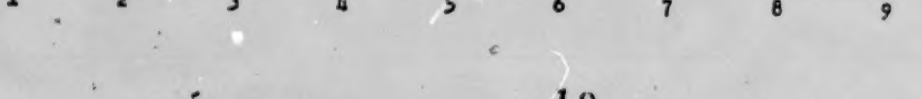
18. This session will influence the way I teach and/or the way I view others teaching.



19. How helpful will the things you learned in this session be for the students in your school district?



20. This session was a valuable experience.



WORKSHOP SESSION EVALUATION

SESSION 1 THIN GRAPH

SESSION 2 HEAVY GRAPH

Teacher _____ Supervisor ..... Administrator - - - - -

1. To what extent was this session related to the teaching concerns of teachers of slow learners?

1.....2.....3.....4.....5.....6.....7.....8.....9

2. How interested would slow learners be in the material presented?

1.....2.....3.....4.....5.....6.....7.....8.....9

3. To what extent would slow learners be challenged by the material?

1.....2.....3.....4.....5.....6.....7.....8.....9

4. I feel that the material described would be useable by a classroom teacher of slow learners.

1.....2.....3.....4.....5.....6.....7.....8.....9

5. This session would be a worthwhile experience for others in my district.

1.....2.....3.....4.....5.....6.....7.....8.....9

6. How well was time apportioned to this activity?

1.....2.....3.....4.....5.....6.....7.....8.....9

7. This session was the type I hoped I would attend at a conference dealing with alternatives for slow learners.

1.....2.....3.....4.....5.....6.....7.....8.....9

8. The presentation was well organized.

1.....2.....3.....4.....5.....6.....7.....8.....9

9. The speaker demonstrated the expertise I would expect from a workshop leader.

1.....2.....3.....4.....5.....6.....7.....8.....9

10. The speaker demonstrated the creativity I would expect from a leader in the field.

1.....2.....3.....4.....5.....6.....7.....8.....9.

11. The speaker communicated his/her ideas well.

1.....2.....3.....4.....5.....6.....7.....8.....9.

12. The session offered stimulating material.

1.....2.....3.....4.....5.....6.....7.....8.....9

13. My questions were dealt with satisfactorily.

1.....2.....3.....4.....5.....6.....7.....8.....9

14. To what extent would the content of this session be of practical use for classrooms in your school (district)?

1.....2.....3.....4.....5.....6.....7.....8.....9.

15. This session provided me with new understandings about the slow learner.

1.....2.....3.....4.....5.....6.....7.....8.....9.

16. This session helped achieve the objectives of this conference.

1.....2.....3.....4.....5.....6.....7.....8.....9

17. How successful was this session as a training experience for YOU?

1.....2.....3.....4.....5.....6.....7.....8.....9

18. This session will influence the way I teach and/or the way I view others teaching.

1.....2.....3.....4.....5.....6.....7.....8.....9

19. How helpful will the things you learned in this session be for the students in your school district?

1.....2.....3.....4.....5.....6.....7.....8.....9

20. This session was a valuable experience.

1.....2.....3.....4.....5.....6.....7.....8.....9

WORKSHOP SESSION EVALUATION

HOFFMAN

TITLE OF SESSION 1 _____

TITLE OF SESSION 2 _____

CHECK ONE: Teacher_____ Supervisor_____ Administrator_____

1. To what extent was this session related to the teaching concerns of teachers of slow learners?

1 2 3 4 5 6 7 8 9

2. How interested would slow learners be in the material presented?

1 2 3 4 5 6 7 8 9

3. To what extent would slow learners be challenged by the material?

1 2 3 4 5 6 7 8 9

4. I feel that the material described would be useable by a classroom teacher of slow learners.

1 2 3 4 5 6 7 8 9

5. This session would be a worthwhile experience for others in my district.

1 2 3 4 5 6 7 8 9

6. How well was time apportioned to this activity?

1 2 3 4 5 6 7 8 9

7. This session was the type I hoped I would attend at a conference dealing with alternatives for slow learners.

1 2 3 4 5 6 7 8 9

8. The presentation was well organized.

1 2 3 4 5 6 7 8 9

9. The speaker demonstrated the expertise I would expect from a workshop leader.

1 2 3 4 5 6 7 8 9

10. The speaker demonstrated the creativity I would expect from a leader in the field.

11. The speaker communicated his/her ideas well.

12. The session offered stimulating material.

13. My questions were dealt with satisfactorily.

14. To what extent would the content of this session be of practical use for classrooms in your school (district)?

15. This session provided me with new understandings about the slow learner.

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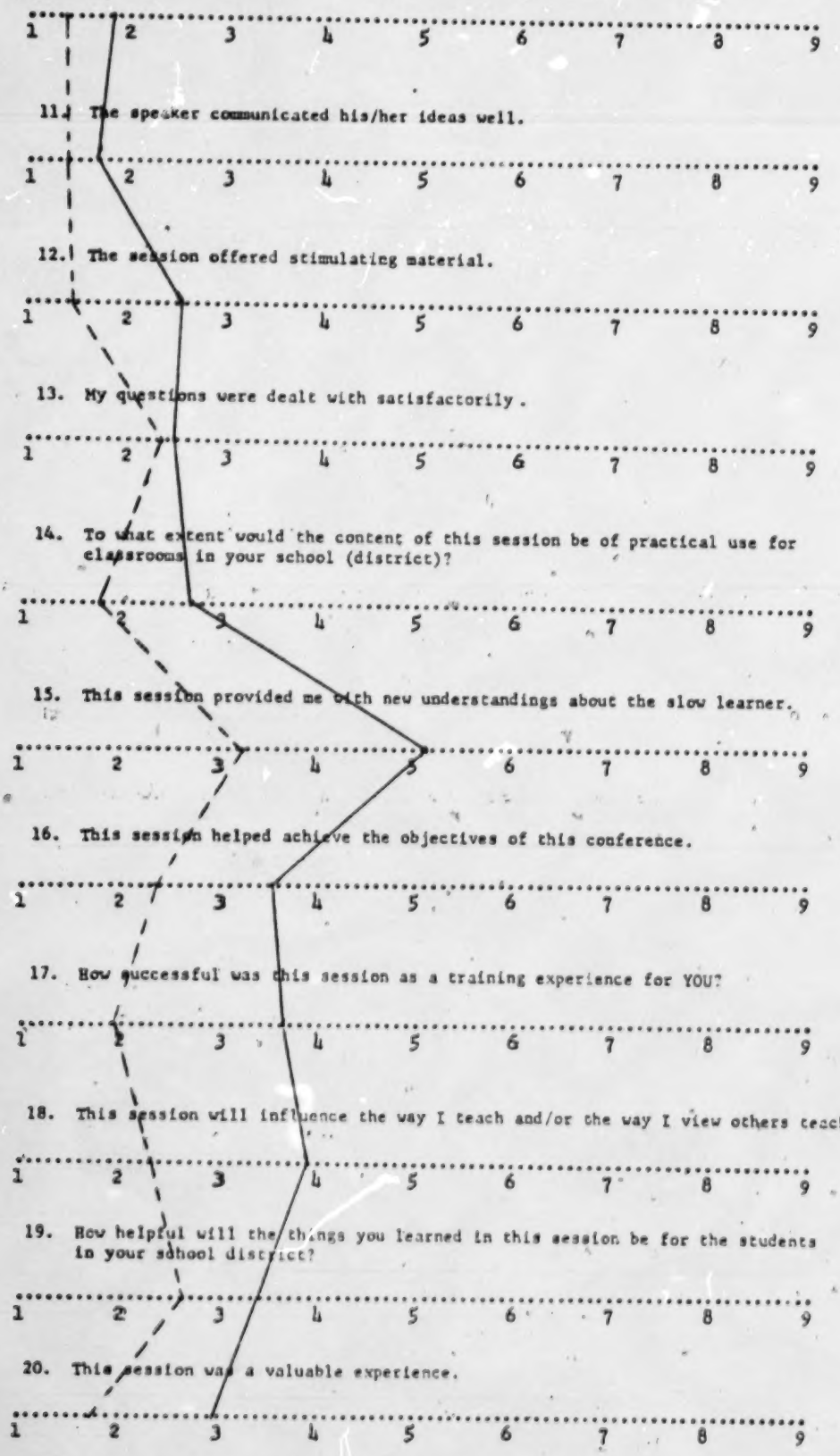
17. How successful was this session as a training experience for YOU?

18. This session will influence the way I teach and/or the way I view others teaching.

19. How helpful will the things you learned in this session be for the students in your school district?

20. This session was a valuable experience.



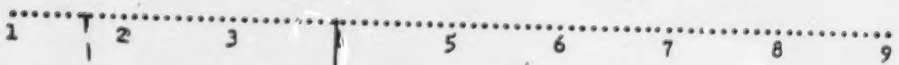
WORKSHOP SESSION EVALUATION

ENGELMEYER
TITLE OF SESSION 1 _____

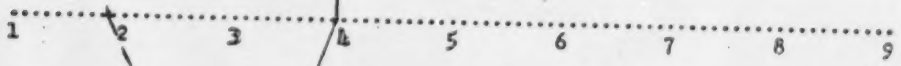
TITLE OF SESSION 2 _____

CHECK ONE: Teacher_____ Supervisor_____ Administrator_____

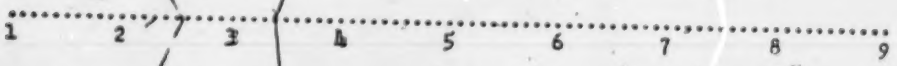
1. To what extent was this session related to the teaching concerns of teachers of slow learners?



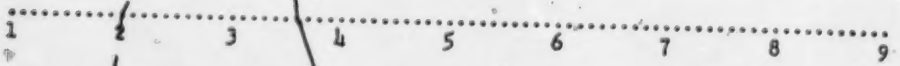
2. How interested would slow learners be in the material presented?



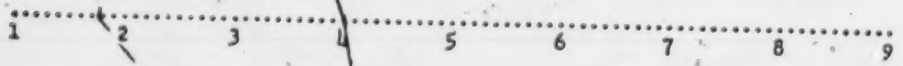
3. To what extent would slow learners be challenged by the material?



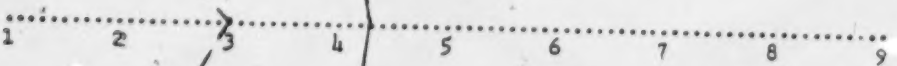
4. I feel that the material described would be useable by a classroom teacher of slow learners.



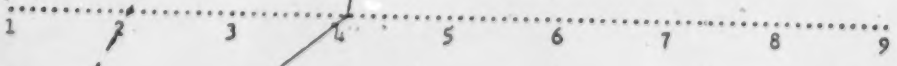
5. This session would be a worthwhile experience for others in my district.



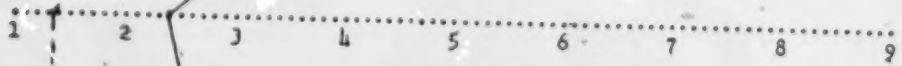
6. How well was time apportioned to this activity?



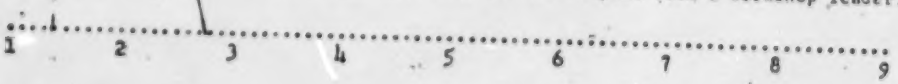
7. This session was the type I hoped I would attend at a conference dealing with alternatives for slow learners.



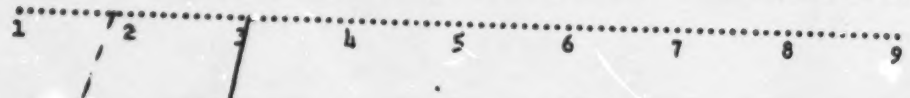
8. The presentation was well organized.



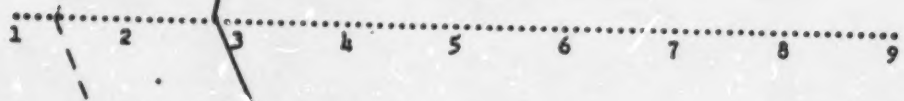
9. The speaker demonstrated the expertise I would expect from a workshop leader.



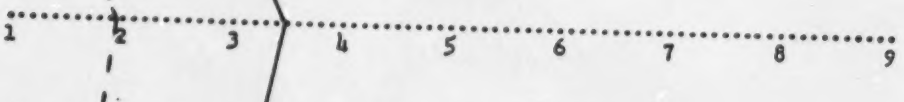
10. The speaker demonstrated the creativity I would expect from a leader in the field.



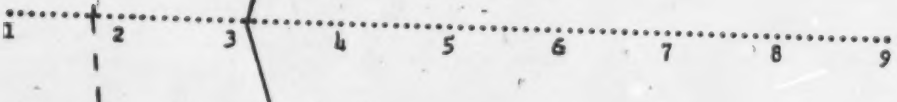
11. The speaker communicated his/her ideas well.



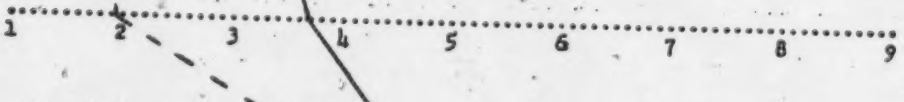
12. The session offered stimulating material.



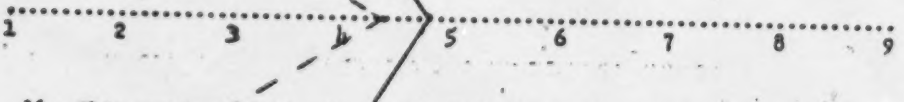
13. My questions were dealt with satisfactorily.



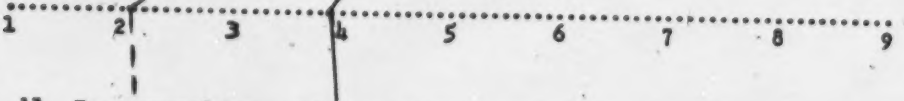
14. To what extent would the content of this session be of practical use for classrooms in your school (district)?



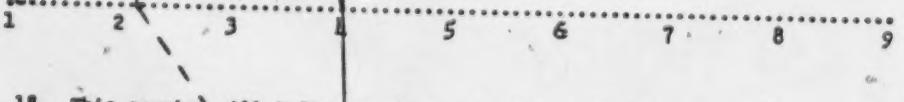
15. This session provided me with new understandings about the slow learner.



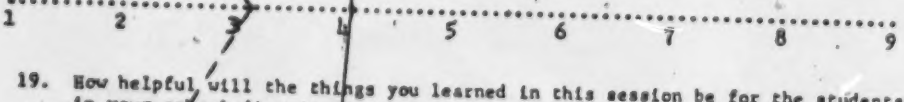
16. This session helped achieve the objectives of this conference.



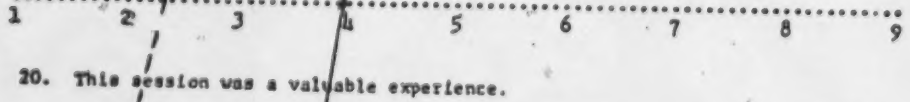
17. How successful was this session as a training experience for YOU?



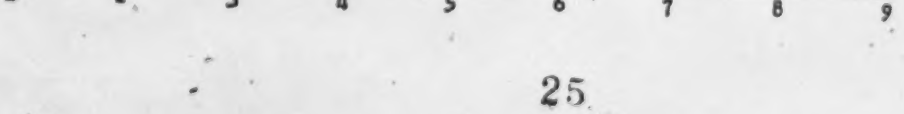
18. This session will influence the way I teach and/or the way I view others teaching.



19. How helpful will the things you learned in this session be for the students in your school district?



20. This session was a valuable experience.



WORKSHOP SESSION EVALUATION

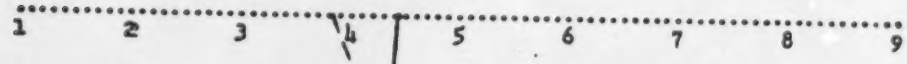
SCHULTZ

TITLE OF SESSION 1 _____

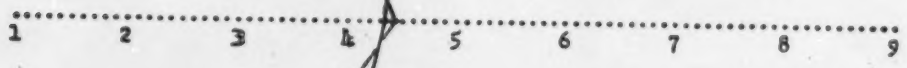
TITLE OF SESSION 2 _____

CHECK ONE: Teacher_____ Supervisor_____ Administrator_____

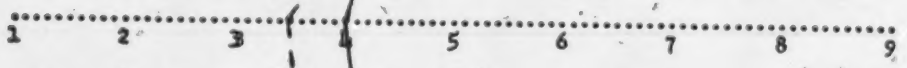
1. To what extent was this session related to the teaching concerns of teachers of slow learners?



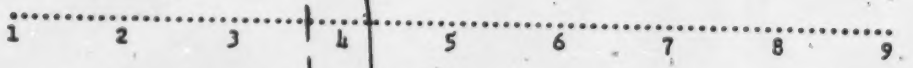
2. How interested would slow learners be in the material presented?



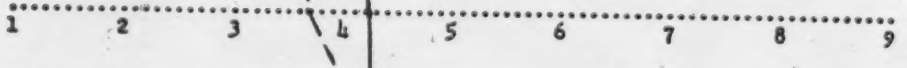
3. To what extent would slow learners be challenged by the material?



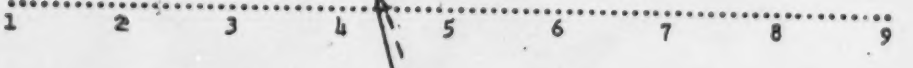
4. I feel that the material described would be useable by a classroom teacher of slow learners.



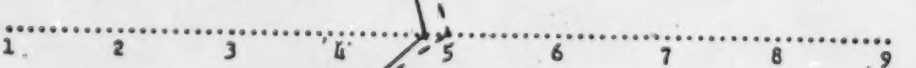
5. This session would be a worthwhile experience for others in my district.



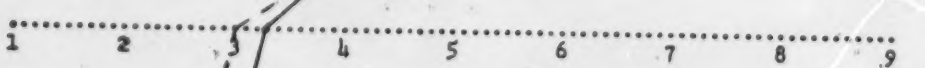
6. How well was time apportioned to this activity?



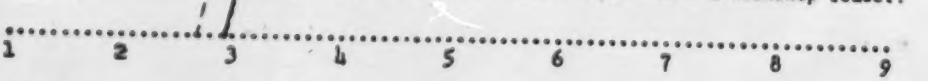
7. This session was the type I hoped I would attend at a conference dealing with alternatives for slow learners.



8. The presentation was well organized.



9. The speaker demonstrated the expertise I would expect from a workshop leader.



10. The speaker demonstrated the creativity I would expect from a leader in the field.

11. The speaker communicated his/her ideas well.

12. The session offered stimulating material.

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14. To what extent would the content of this session be of practical use for classrooms in your school (district)?

15. This session provided me with new understandings about the slow learner.

16. This session helped achieve the objectives of this conference.

17. How successful was this session as a training experience for YOU?

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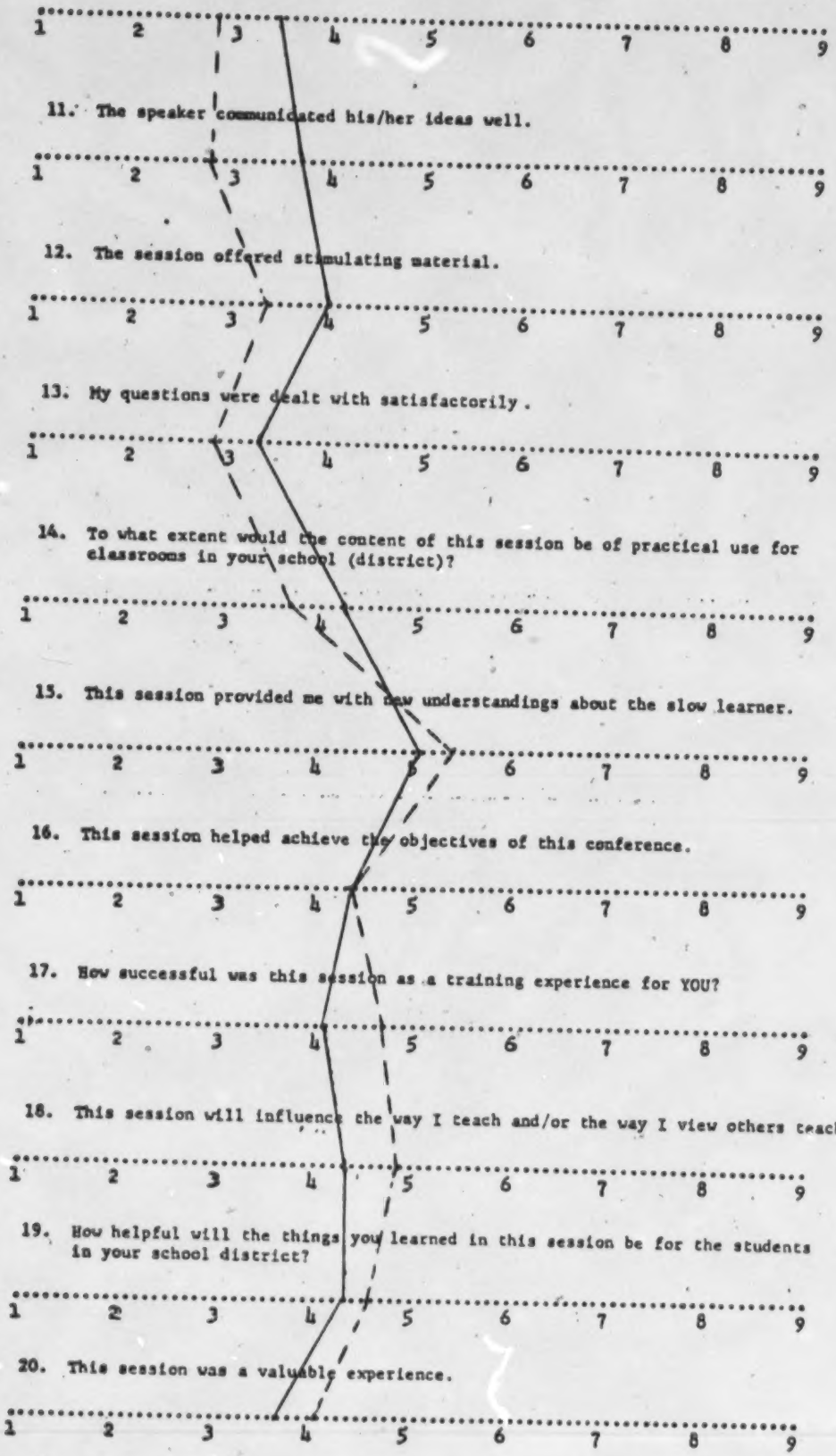


WORKSHOP SESSION EVALUATION

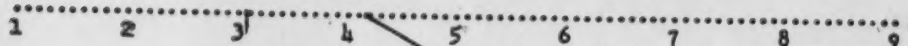
STOPA

TITLE OF SESSION 1 _____

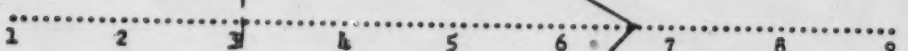
TITLE OF SESSION 2 _____

CHECK ONE: Teacher_____ Supervisor_____ Administrator_____

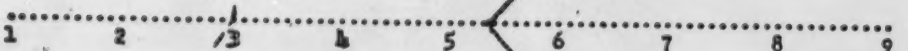
1. To what extent was this session related to the teaching concerns of teachers of slow learners?



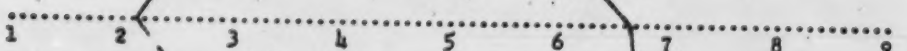
2. How interested would slow learners be in the material presented?



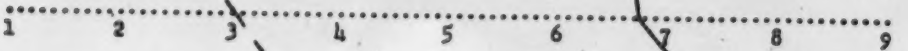
3. To what extent would slow learners be challenged by the material?



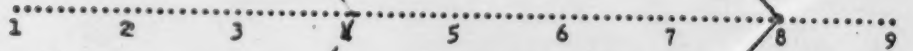
4. I feel that the material described would be useable by a classroom teacher of slow learners.



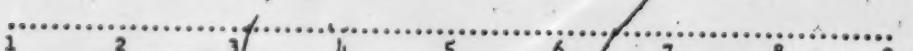
5. This session would be a worthwhile experience for others in my district.



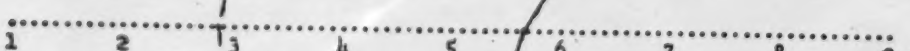
6. How well was time apportioned to this activity?



7. This session was the type I hoped I would attend at a conference dealing with alternatives for slow learners.



8. The presentation was well organized.



9. The speaker demonstrated the expertise I would expect from a workshop leader.

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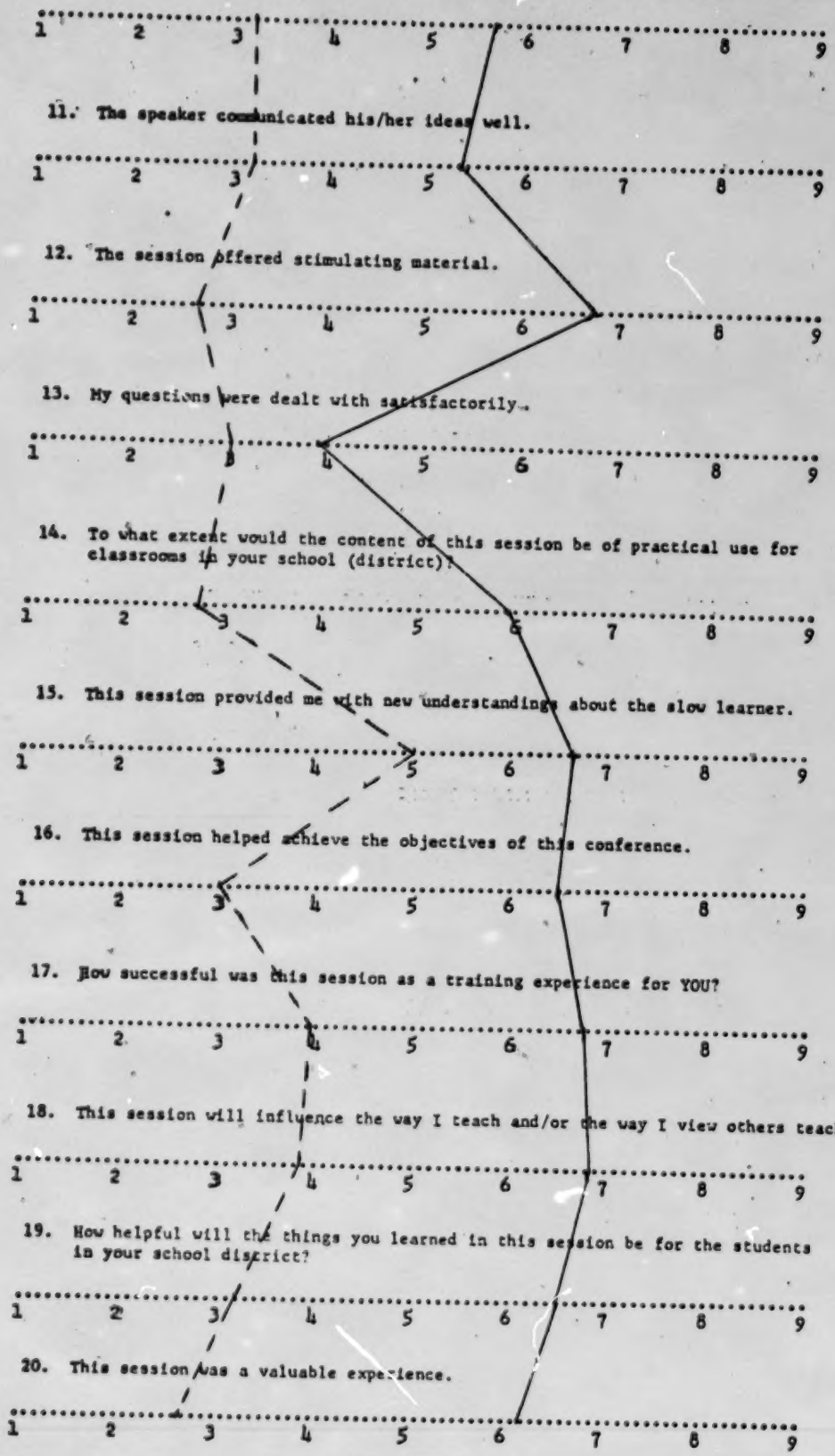


SUMMER CONFERENCE

Evaluation of the Workshop Sessions

This second conference, like the first, had four workshop sessions held over a two day period. Unlike the first conference, however, two of the sessions dealt primarily with interchange among the conference participants. These two sessions were entitled "Action Diagnosis" and "Information Sharing and Exchange". All conference participants attended each of these sessions as a group. The other two sessions involved outside (guest) speakers. For these workshops the groups were divided so that approximately half of the total participants were involved in either workshop at any time. The groups were interchanged after the first session.

Each conference participant completed the same twenty item questionnaire that had been used at the first conference to evaluate the workshop sessions. Each item on the questionnaire had a nine-point scale with 1 representing the most positive response. The data collected from the workshop participants were analyzed using an SPSS package and descriptive statistics were generated. A profile of the ratings given the two workshop leaders (guests) was prepared giving session 1 and session 11 ratings. These were presented to the conference coordinator to use for feedback to his speakers. They appear as an appendix to his report. A summary of the session 1 and session 11 ratings was also prepared. The graphs and observations follow. Also included in an appendix is a factor analysis of the responses on the items for the two sessions.

Observations From the Graphs of the Workshop Evaluation Ratings

1. Ratings for session 1 and session 11 were quite similar on all questions.
2. Session 1 received the same ratings or higher ratings than session 11 on the first 13 items in the questionnaire. On the remaining items the scores remained close to each other but there were several reversals between ratings for session 1 and session 11 comparatively.

3. Within the groups of participants (teachers, administrators and supervisors) the ratings of the two sessions remained close from session to session. Between the three groups, however, marked differences in ratings did appear. Administrators consistently gave lower ratings on all questions (items) than either the teachers or the supervisors. The graphs for these two groups intersect frequently, however in general, the supervisors tended to give slightly more positive ratings overall.

Further analysis of the data tends to reinforce the observations made from the graphs. t-tests were run on the difference between the mean ratings on each item for session I and session II. Only one item showed significant differences on the total group evaluation.

Item 9 - <u>The speaker demonstrated the expertise I would expect from a workshop leader</u> - showed significant difference ($t=2.06$, $p=.043$) for all groups, however no significant differences were found within each group. In fact, of all the 80 separate t-tests run (one each for each of the 20 items for the three groups and for all participants as a single group) this was the only test with significant differences.

Tabulating the data for all workshop sessions yielded the following:

The grand mean for all workshops, for all participants, for all sessions: a favorable rating with 1 as most favorable and 9 as most unfavorable

$\bar{X} = 2.7071$ s.d. = 1.5485

The separate scores for session 1 and session II indicate the closeness

$\bar{X} = 2.6348$ $\bar{X} = 2.7794$

s.d. = 1.426 s.d. = 1.671

Conference Evaluation

In addition to the workshop evaluation, each participant completed a 7 item conference evaluation. The first five items tapped the contributions (positive and negative) made by the different factors in the organization of this conference. The sixth item can be used to compare the ratings given the workshop sessions to the overall rating given the conference. To do this you must reverse the workshop score, which had 1 as the most positive response, to correspond to the conference evaluation score, which used a similar nine point scale with 9 as the most positive response.

WORKSHOPS			
Session I	Session II	Total	Conference
s.d.=6.3652	s.d.=6.2206	s.d.=6.2929	s.d.=7.35

The graph of the conference evaluation questionnaire (see attached) indicated results similar to those of the workshop evaluations. In general, supervisors were most favorable in their responses while administrators were least favorable. It is interesting to note that the greatest difference between groups occurred on the overall evaluation. Teachers and supervisors were very favorable in their ratings while administrators were more neutral, though still on the positive side.

Comparison Between the Spring and Summer Conferences

One point of interest is to judge the relative ratings given the two conferences. This was done by comparing the responses on two specific items which appeared on both conference evaluation questionnaires.

Item 4 - A team consisting of a teacher, supervisor and administrator from the same district attended the conference.

Item 6 - Please give your overall evaluation of this conference.

Four different t-tests for the difference between means were run on each of

all evaluation (item 6) for administrators. Administrators rated this conference significantly lower (less valuable) than they had rated the Spring conference. It is interesting to note that both teachers and supervisors gave higher overall ratings to this conference but the results did not differ significantly from those in April.

The final item on the conference evaluation form asked for a comparison between the two conferences. It is not surprising to note that Supervisors again were most positive in their response, administrators most negative but all were close to the midpoint of the scale feeling that this conference was almost equal in value to the Spring sessions.

Summary of Free Response

In addition to statistical data gathered on the conference evaluation forms, participants were given the opportunity to make additional comments. Free responses were found according to the following breakdowns.

3 of 8 teachers
3 of 6 supervisors
3 of 6 administrators

One person used the comment section to explain why the two conferences were not comparable in terms of value.

Three (2 supervisors and 1 teacher) indicated that they thought the conference was extremely valuable, worthwhile and adaptable to classroom instruction. The three administrators seemed to feel that this conference lacked a common meeting among administrators where the logistics of program implementation could have been discussed. This was a shortcoming of the program and as such the program was probably of more value for teachers and supervisors than it was for administrators.

One person suggested more emphasis on actual daily classroom organization and further suggested the showing of films depicting different techniques in use in the classroom.

CONFERENCE EVALUATION 8/78

CHECK ONE: Teacher ———— Supervisor - - - - - Administrator — — — —

DIRECTIONS: Consider the numbers on the rating scale as continuous with the description indicating direction. Circle only ONE number in response to each statement.

Indicate the extent to which each of the following characteristics of this conference contributed to the overall success of the conference.

1. The conference took place before the actual start of the school year rather than once it was underway.

-4 -3 -2 -1 0 +1 +2 +3 +4
Detracted greatly — Contributed nothing — Added greatly

2. The conference was conducted in the working atmosphere of an educational facility.

-4 -3 -2 -1 0 +1 +2 +3 +4
Detracted greatly — Contributed nothing — Added greatly

3. The participants were not required to remain together for the entire duration of the conference.

-4 -3 -2 -1 0 +1 +2 +3 +4
Detracted greatly — Contributed nothing — Added greatly

4. A team consisting of a teacher, supervisor and administrator from the same district attended the conference.

-4 -3 -2 -1 0 +1 +2 +3 +4
Detracted greatly — Contributed nothing — Added greatly

5. The focus of the conference was presentations by the participants.

-4 -3 -2 -1 0 +1 +2 +3 +4
Detracted greatly — Contributed nothing — Added greatly

Please give your overall evaluation of this conference.

1 2 3 4 5 6 7 8 9
Waste of time — More or less worthwhile — Extremely Valuable

Please compare this conference to the Spring conference.

-4 -3 -2 -1 0 +1 +2 +3 +4
Less valuable — About the same — More valuable

Please use the back of this sheet to make any additional comments. Your suggestions previously were very helpful and we would appreciate more.

WORKSHOP SESSION EVALUATION

TITLE OF SESSION 1 _____

TITLE OF SESSION 2 _____

CHECK ONE: Teacher_____ Supervisor_____ Administrator_____

1. To what extent was this session related to the teaching concerns of teachers of slow learners?

1 2 3 4 5 6 7 8 9

2. How interested would slow learners be in the material presented?

1 2 3 4 5 6 7 8 9

3. To what extent would slow learners be challenged by the material?

1 2 3 4 5 6 7 8 9

4. I feel that the material described would be useable by a classroom teacher of slow learners.

1 2 3 4 5 6 7 8 9

5. This session would be a worthwhile experience for others in my district.

1 2 3 4 5 6 7 8 9

6. How well was time apportioned to this activity?

1 2 3 4 5 6 7 8 9

7. This session was the type I hoped I would attend at a conference dealing with alternatives for slow learners.

1 2 3 4 5 6 7 8 9

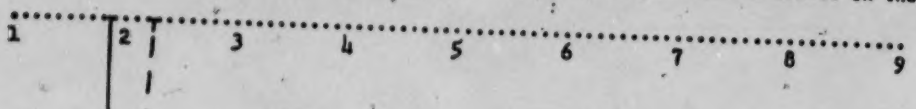
8. The presentation was well organized.

1 2 3 4 5 6 7 8 9

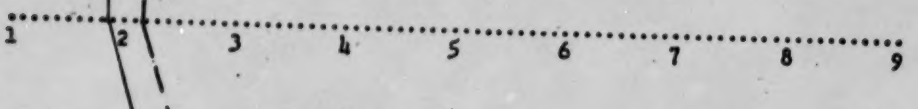
9. The speaker demonstrated the expertise I would expect from a workshop leader.

1 2 3 4 5 6 7 8 9

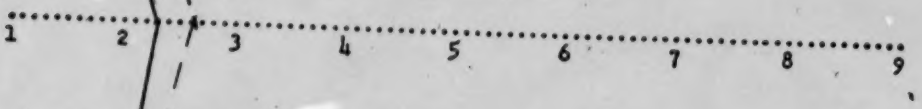
10. The speaker demonstrated the creativity I would expect from a leader in the field.



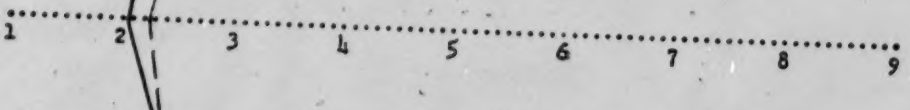
11. The speaker communicated his/her ideas well.



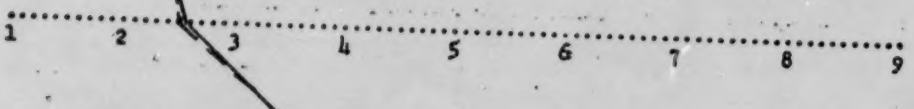
12. The session offered stimulating material.



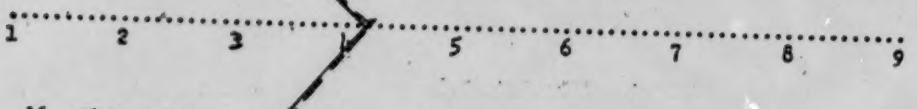
13. My questions were dealt with satisfactorily.



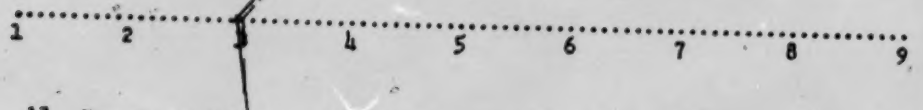
14. To what extent would the content of this session be of practical use for classrooms in your school (district)?



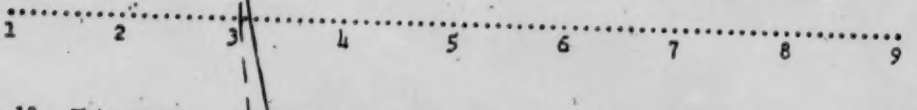
15. This session provided me with new understandings about the slow learner.



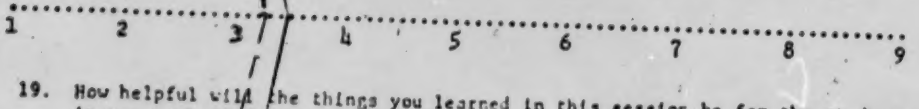
16. This session helped achieve the objectives of this conference.



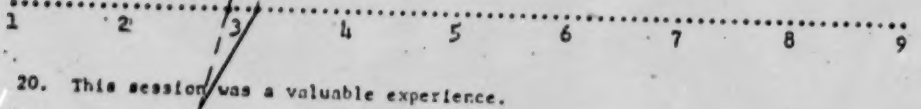
17. How successful was this session as a training experience for YOU?



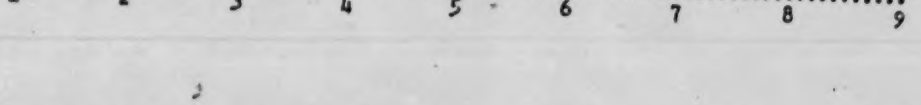
18. This session will influence the way I teach and/or the way I view others teaching.



19. How helpful will the things you learned in this session be for the students in your school district?



20. This session was a valuable experience.



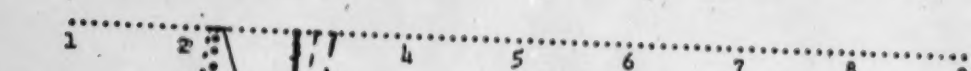
WORKSHOP SESSION EVALUATION

TITLE OF SESSION 1 LIGHT

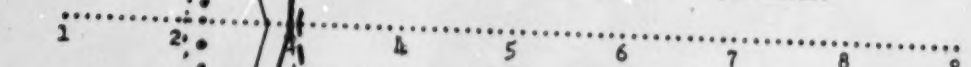
TITLE OF SESSION 2 HEAVY

CHECK ONE: Teacher _____ Supervisor • • • • • • Administrator — — — —

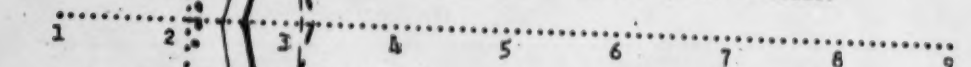
1. To what extent was this session related to the teaching concerns of teachers of slow learners?



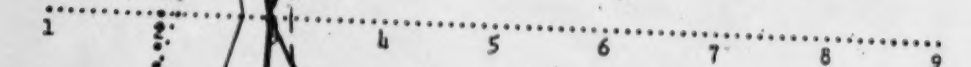
2. How interested would slow learners be in the material presented?



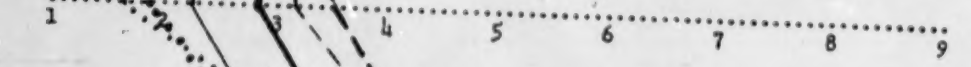
3. To what extent would slow learners be challenged by the material?



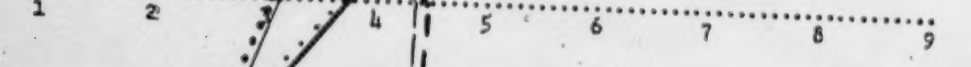
4. I feel that the material described would be useable by a classroom teacher of slow learners.



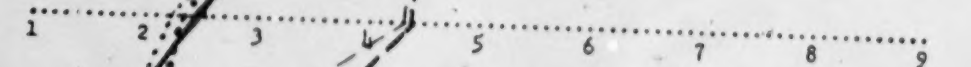
5. This session would be a worthwhile experience for others in my district.



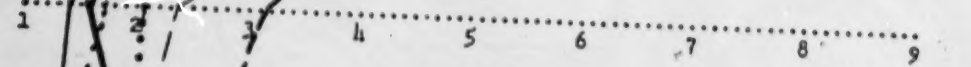
6. How well was time apportioned to this activity?



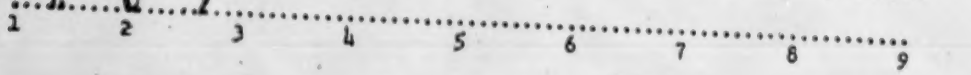
7. This session was the type I hoped I would attend at a conference dealing with alternatives for slow learners.



8. The presentation was well organized.



9. The speaker demonstrated the expertise I would expect from a workshop leader.



10. The speaker demonstrated the creativity I would expect from a leader in the field.

11. The speaker communicated his/her ideas well.

12. The session offered stimulating material.

13. My questions were dealt with satisfactorily.

14. To what extent would the content of this session be of practical use for classrooms in your school (district)?

15. This session provided me with new understandings about the slow learner.

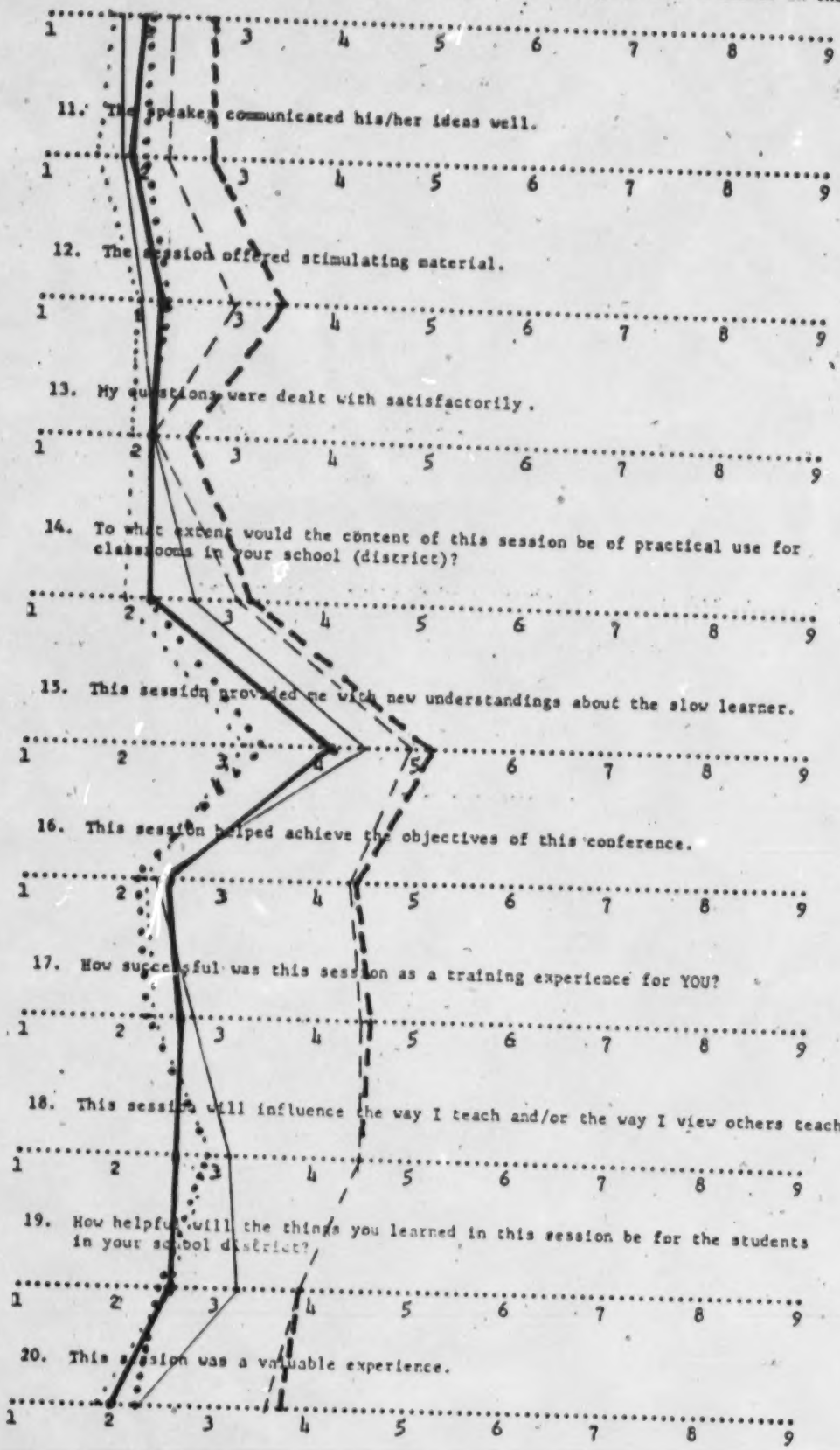
16. This session helped achieve the objectives of this conference.

17. How successful was this session as a training experience for YOU?

18. This session will influence the way I teach and/or the way I view others teaching.

19. How helpful will the things you learned in this session be for the students in your school district?

20. This session was a valuable experience.



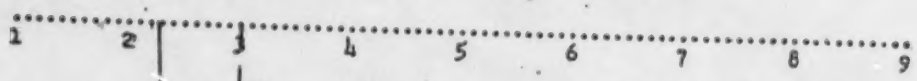
WORKSHOP SESSION EVALUATION

TITLE OF SESSION 1 ACTION DIAGNOSIS

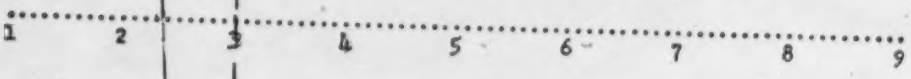
TITLE OF SESSION 2 SHARING

CHECK ONE: Teacher_____ Supervisor_____ Administrator_____

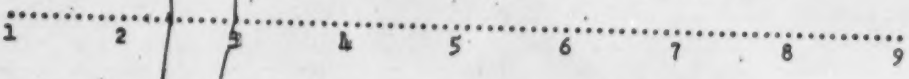
1. To what extent was this session related to the teaching concerns of teachers of slow learners?



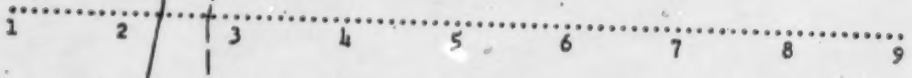
2. How interested would slow learners be in the material presented?



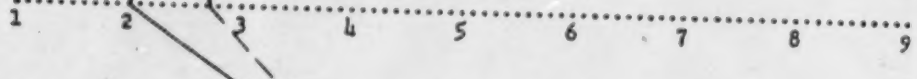
3. To what extent would slow learners be challenged by the material?



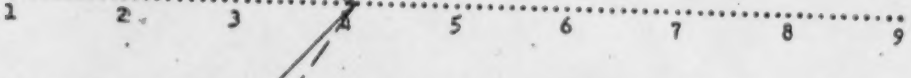
4. I feel that the material described would be useable by a classroom teacher of slow learners.



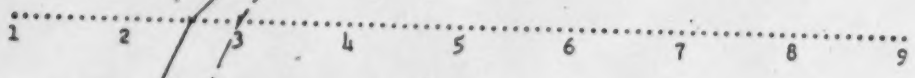
5. This session would be a worthwhile experience for others in my district.



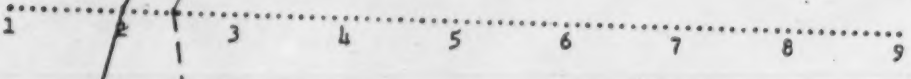
6. How well was time apportioned to this activity?



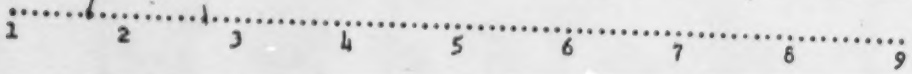
7. This session was the type I hoped I would attend at a conference dealing with alternatives for slow learners.



8. The presentation was well organized.



9. The speaker demonstrated the expertise I would expect from a workshop leader.



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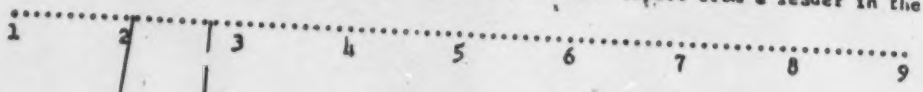
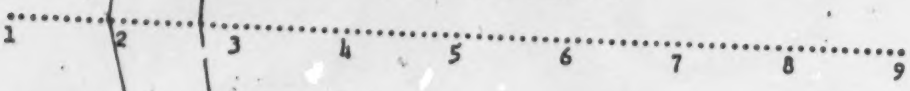
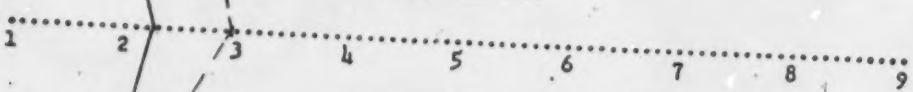


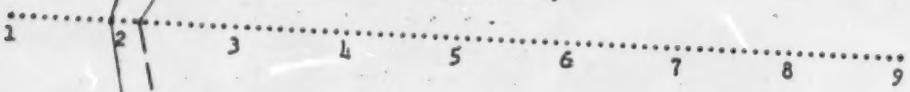
11. The speaker communicated his/her ideas well.



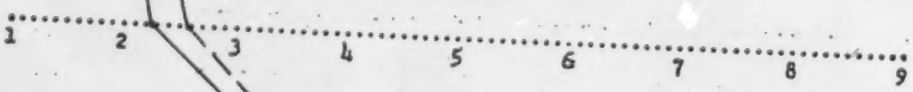
12. The session offered stimulating material.



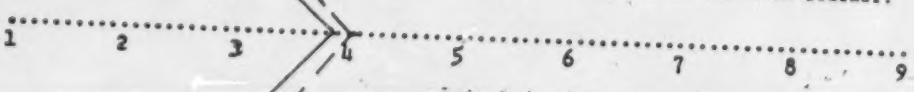
13. My questions were dealt with satisfactorily.



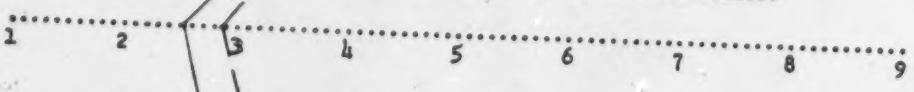
14. To what extent would the content of this session be of practical use for classrooms in your school (district)?



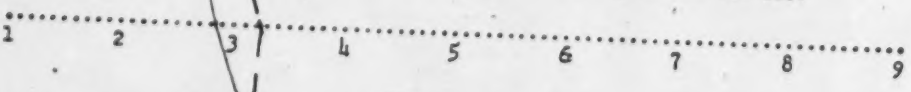
15. This session provided me with new understandings about the slow learner.



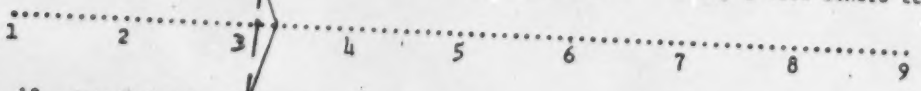
16. This session helped achieve the objectives of this conference.



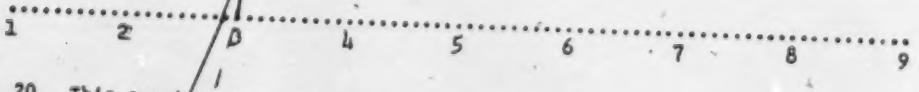
17. How successful was this session as a training experience for YOU?



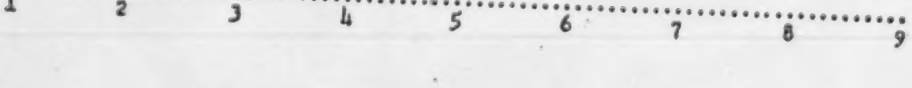
18. This session will influence the way I teach and/or the way I view others teaching.



19. How helpful will the things you learned in this session be for the students in your school district?



20. This session was a valuable experience.



WORKSHOP SESSION EVALUATION

TITLE OF SESSION 1 Hoffman —

TITLE OF SESSION 2 ---

CHECK ONE: Teacher_____ Supervisor_____ Administrator_____

1. To what extent was this session related to the teaching concerns of teachers of slow learners?

1 2 3 4 5 6 7 8 9

2. How interested would slow learners be in the material presented?

1 2 3 4 5 6 7 8 9

3. To what extent would slow learners be challenged by the material?

1 2 3 4 5 6 7 8 9

4. I feel that the material described would be useable by a classroom teacher of slow learners.

1 2 3 4 5 6 7 8 9

5. This session would be a worthwhile experience for others in my district.

1 2 3 4 5 6 7 8 9

6. How well was time apportioned to this activity?

1 2 3 4 5 6 7 8 9

7. This session was the type I hoped I would attend at a conference dealing with alternatives for slow learners.

1 2 3 4 5 6 7 8 9

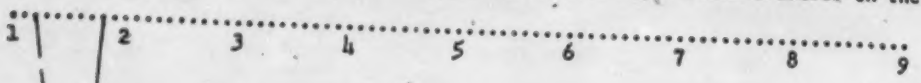
8. The presentation was well organized.

1 2 3 4 5 6 7 8 9

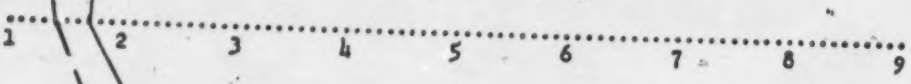
9. The speaker demonstrated the expertise I would expect from a workshop leader.

1 2 3 4 5 6 7 8 9

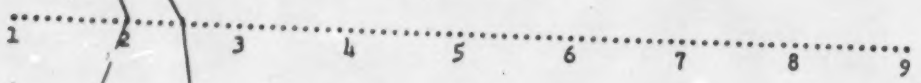
10. The speaker demonstrated the creativity I would expect from a leader in the field.



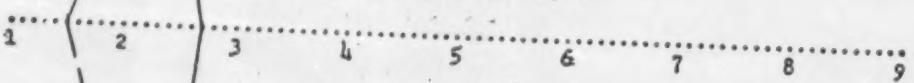
11. The speaker communicated his/her ideas well.



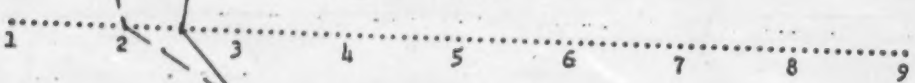
12. The session offered stimulating material.



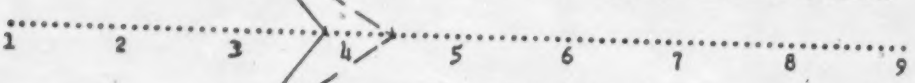
13. My questions were dealt with satisfactorily.



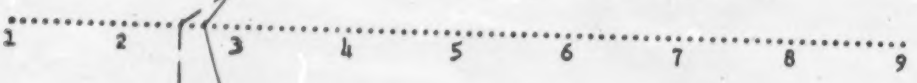
14. To what extent would the content of this session be of practical use for classrooms in your school (district)?



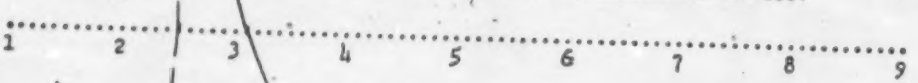
15. This session provided me with new understandings about the slow learner.



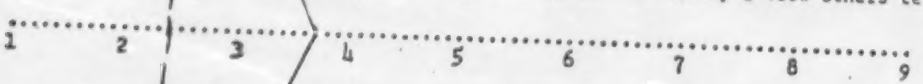
16. This session helped achieve the objectives of this conference.



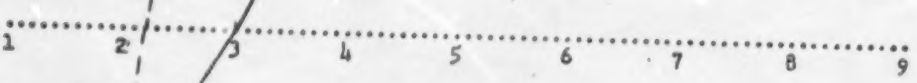
17. How successful was this session as a training experience for YOU?



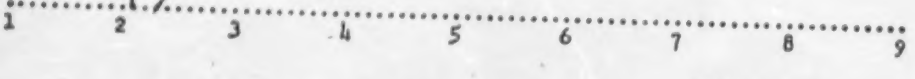
18. This session will influence the way I teach and/or the way I view others teaching.



19. How helpful will the things you learned in this session be for the students in your school district?



20. This session was a valuable experience.



WORKSHOP SESSION EVALUATION

TITLE OF SESSION 1 MALETSKY

TITLE OF SESSION 2 ———

CHECK ONE: Teacher_____ Supervisor_____ Administrator_____

1. To what extent was this session related to the teaching concerns of teachers of slow learners?

1 2 3 4 5 6 7 8 9

2. How interested would slow learners be in the material presented?

1 2 3 4 5 6 7 8 9

3. To what extent would slow learners be challenged by the material?

1 2 3 4 5 6 7 8 9

4. I feel that the material described would be useable by a classroom teacher of slow learners.

1 2 3 4 5 6 7 8 9

5. This session would be a worthwhile experience for others in my district.

1 2 3 4 5 6 7 8 9

6. How well was time apportioned to this activity?

1 2 3 4 5 6 7 8 9

7. This session was the type I hoped I would attend at a conference dealing with alternatives for slow learners.

1 2 3 4 5 6 7 8 9

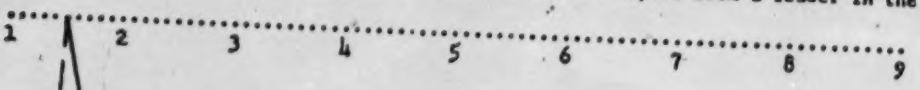
8. The presentation was well organized.

1 2 3 4 5 6 7 8 9

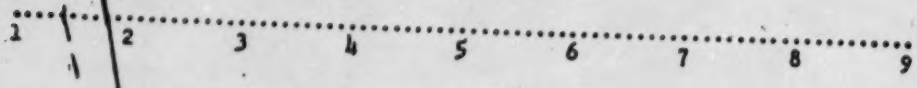
9. The speaker demonstrated the expertise I would expect from a workshop leader.

1 2 3 4 5 6 7 8 9

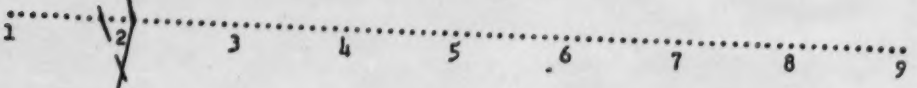
10. The speaker demonstrated the creativity I would expect from a leader in the field.



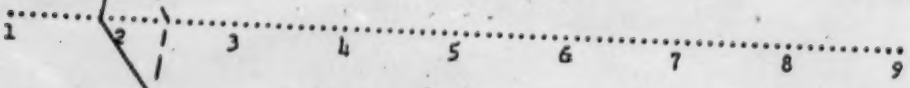
11. The speaker communicated his/her ideas well.



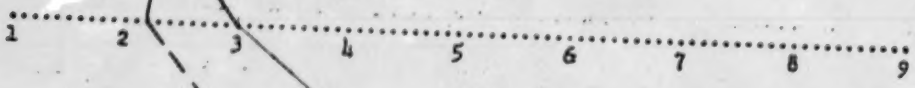
12. The session offered stimulating material.



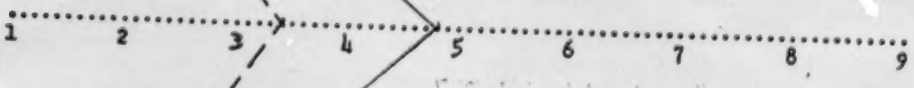
13. My questions were dealt with satisfactorily.



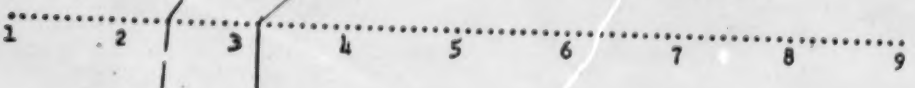
14. To what extent would the content of this session be of practical use for classrooms in your school (district)?



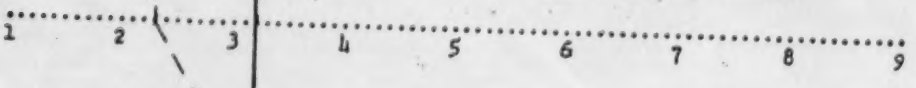
15. This session provided me with new understandings about the slow learner.



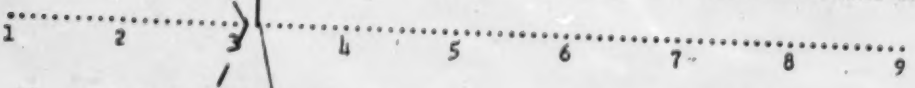
16. This session helped achieve the objectives of this conference.



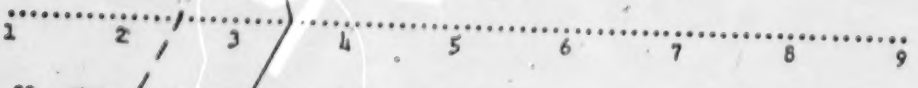
17. How successful was this session as a training experience for YOU?



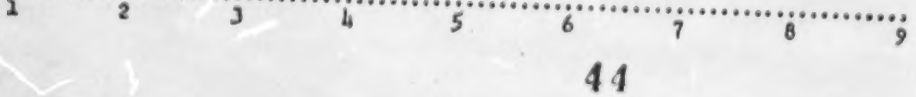
18. This session will influence the way I teach and/or the way I view others teaching.



19. How helpful will the things you learned in this session be for the students in your school district?



20. This session was a valuable experience.



Appendix

Bartlett's Test of Spherity was performed on two 21 variable correlation matrices consisting of the 20 item workshop evaluation questionnaire statement plus the variable "position in school." A separate test for workshop session I and session II was performed. In each case Chi Square was highly significant beyond the .01 level (x^2=801.96 df=210, p<.002 fa session I, $x^2=7.23 \times 10^{75}$, df=210, p<.0002 for session II) thus permitting the rejection of the null hypothesis that the elements of each set are uncorrelated.

These results permitted a factor analytic approach even though there were relatively few subjects (N=20). Principal Factoring with Iteration, SPSS PA 2, was applied. The estimate of communality was the squared multiple correlation. A varimax rotation was then applied to the number of components having eigenvalues greater than or equal to 1.0. Only variables having loadings of greater than .40 in absolute value were deemed significant in the interpretation.

Results - Session I Evaluations

The responses for session I and session II were factored separately. For session I, 4 factors met the criteria for rotation with these factors accounting for 77.8% of the total variance. There were 32 loadings with an absolute value of 0.4 or greater all of which were positive. There were 8 on the first factor, 10 on the second factor, 10 on the third and 4 on the fourth. Nine of the variables had significant loadings on two or more factors, none loaded on all four and twelve variables loaded on one and only one factor.

Factor One (Session I)

Factor One may be interpreted as a Professional Evaluation Factor. Of the 8 variables loading on this factor, 5 variables had loadings of from .70 to .87. Four of these variables dealt with the organization, expertise, creativity and

communication skills of the speaker. These four variables loaded only on this factor. Other significant variables dealing with the value of the session in general, its influence on future teaching, its success as a training experience and whether the material was stimulating had loadings on this factor as well as on factor 3. This is interpreted as meaning that these variables not only tap into how one evaluates another professionals on a professional expertise level but also into some other factor. Further, and probably more important, in evaluating one's performance weight is given not only to how the material is presented but also to the worth of the material presented.

Factor I accounted for 72% of the variance.

Factor Two

Factor two has been interpreted as a Relevance Factor. Four variables had loadings of between .75 and .88 on this factor. These variables had no significant loadings on any other factor. The items were: "Was the session related to the teaching concerns of those teaching slow learners?" How interested would slow learners be, and How challenged would slow learners be. Five variables had significant loadings on this as well as on factor 3. These variables, "worthwhile experience for others, practical use in the classroom, achieving conference objectives, the general value of the session and helpfulness to students", all tap a relevance factor however they also contribute to another factor as well.

Factor two accounted for 15.1% of the total variance.

Factor Three

Factor three which accounts for one half the remaining variance is interpreted to be a Personal Satisfaction Factor. While ten variables had significant loadings on this factor only two were found with no other significant loadings. These items were (#13) - My questions were dealt with satisfactorily and (#15) - The session provided me with a new understanding about the slow learner. Other variable loading on this factor were doublets (items 5, 12, 14, 17, 18 and 19) or triplets (items 16, 20). There is a common thread, however, of personal influence or judge-

ment. The fact that these personal variables also influence other factors is important. Personal satisfaction factor of variables such as "successful training experience, influence my teaching, achieve conference objectives, practical, useful stimulating also appear as variables in factors 1 and 2.

Factor Four

The final factor can be interpreted as an Administrative Disappointment Factor. Of the four variables showing significant loadings on this factor, Position in School and judgement of time allocation (loadings of .61 and .65 respectively) had no significant loadings on any other factor. The other two variables of significance were item 7, this was the type of session I hoped I would attend, and item 16, the session achieved the conference objectives. These four items taken in light of the feedback given by 3 of the six administrators in the free response section of the conference evaluation form led to the interpretation of disappointment. The administrators felt that they did not have enough time together as a separate group. They felt that the sessions were more valuable for those directly involved in the curriculum area. As such they were somewhat disappointed with the results.

Results - Session II

Session II factor analysis yielded only three factors meeting the criteria established. These three factors accounted for 78.9% of the total variance or slightly more than the four factors found for session I results. There were 27 loadings with an absolute value of 0.4 or greater of which 26 were positive and 1 negative. 17 variables loaded on the first factor, 8 on the second and only 2 on the third. 6 variables were doublet loads while the remaining 15 variables loaded on only one factor.

Factor One

Factor one which accounted for 84.1% of the variance contained loadings from so many variables that it can only be interpreted as a General Satisfaction with

Outcomes Factor. 17 of the 21 variables loaded significantly on this factor, thus it is probably more important to investigate the variables which did not load on this factor. Only items 8, 10, 11 and position in school failed to load significantly. Aside from the position in school variable, all other non-significant variables dealt with an evaluation of the presenter. The highest loading on Factor I, those with a 0.8 or greater were items 1, 2, 4, 5, 14, 17 and 19. All of these had the common thread of satisfaction with the interest, usability, practicality, helpfulness and general success of the session. In reality this factor seems to be a merging of the Personal Satisfaction and Relevance Factors found in the analysis of session I. The merging of these two factors seems to have greater weight than the two factors as separate entities.

Factor Two

Factor Two, accounting for more than half of the remaining variance, 9%, is almost identical to factor one of the first session, and is again interpreted as a Professional Evaluation Factor. The heaviest loadings were from variables 8 through 12 dealing with organization, speaker expertise, creativity, communication skills and the stimulating nature of the material presented. Item 3, the extent to which slow learners would be challenged by the material, had a lower but still significant loading (0.52). This is interpreted to mean that in evaluating a person's performance in presenting material, some valuation is made of the content and this valuation has an effect on the evaluation of the overall performance.

It should also be pointed out that session II had as one of its components "Information Sharing". It is possible that as the people became more actively involved in the session the general satisfaction factor became primary and the professional evaluation factor (which for this session was really a peer evaluation) became secondary. This could account for the fact that in session I, professional evaluation was the factor accounting for the most variance while in session II it moved to second.

Factor Three

Factor three does not lend itself to a clear cut label. Only two variables had loadings on this factor. Position in School had a positive loading of .64 and did not load significantly on any other factor. One might be tempted to give this label to the third factor. However, useability in the classroom, variable 4, had a significant negative loading (-.4) on this factor. That would have been explained by position in school if it weren't for the fact that administrators and teachers (coded 3 and 1 respectively) gave this item equal ratings. Only supervisors gave this a more positive rating.

Summary of Guest Speaker Evaluations

Viewing the graphs of the evaluations of both Prof. Maletsky and Prof. Hoffman lead to some very simple observations. Both speakers received very positive ratings on the items tapping a professional evaluation. Their ratings were between 1 and 2 on all items with 1 being the most positive possible. For the great majority of items (16 out of 20 for Maletsky and 18 out of 20 for Hoffman) the second session received more positive ratings than the first. This indicates that any changes that the speakers made between their session I and session II presentations received generally favorable receptions.

Significant Loadings on Each Factor for Session I.

Item	Item Content	Factor 1	Factor 2	Factor 3	Factor 4
9	Speaker demonstrated expertise	.870			
10	Speaker demonstrated creativity	.751			
8	Presentation was organized	.747			
11	Speaker communicated ideas well	.701			
12	Material was stimulating	.809		.415	
3	Slow learners challenged by material		.876		
2	Slow learners interested in material		.873		
1	Session related to teaching concerns		.809		
4	Material useable in the classroom		.755		
13	My questions were dealt with			.581	
15	Provided me with new understandings			.550	
14	Practical for use in my district		.509	.707	
19	Helpful for students in my district		.534	.652	
5	Worthwhile for others in my district		.503	.640	
16	Achieved conference objectives		.404	.562	.475
17	Successful training for me	.604		.560	
18	Will influence my teaching	.532		.487	
20	A valuable experience	.563	.439	.522	
6	Time apportionment				.649
-	Position in school (coded)				.606
7	The type of session I wanted		.555		.468

Significant Loadings on Each Factor for Session II.

Item	Item Content	Factor 1	Factor 2	Factor 3
19	Helpful for students in my district	.848		
5	Worthwhile for others in my district	.827		
1	Session related to teaching concerns	.825		
2	Slow learners interested in material	.823		
14	Practical for use in my district	.812		
17	Successful training for me	.810		
4	Material useable in the classroom	.802		-.402
16	Achieved conference objectives	.788		
18	Will influence my teaching	.582		
13	My questions were dealt with	.573		
6	Time apportionment	.482		
10	Speaker demonstrated creativity		.898	
11	Speaker communicated ideas well		.866	
8	Presentation was organized		.750	
9	Speaker demonstrated expertise	.458	.830	
12	Material was stimulating	.650	.637	
3	Slow learners challenged by material	.642	.521	
20	A valuable experience	.774	.471	
7	The type of session I wanted	.732	.455	
-	Position in school			.645

Suggestions for Improvement

The workshop format of the conferences successfully achieved its stated goals of information dissemination. The evaluation questionnaires clearly show a high level of participant satisfaction with virtually all of the workshop leaders at both conferences. They feel that the important factors were the "away-from-school" setting with all the everyday pressures and problems out of their minds; the opportunities for interaction particularly during the overnight conference; particularly effective resource people; and exposure to a limited number of workshop leaders on a single central theme.

A need was expressed, particularly by the administrators for greater opportunities to meet with each other and share common problems, particularly practices in implementation of programs. This will be built into future conferences.

The difficulty experienced in making field visits illustrates a need to clarify the role of this aspect of the program. In part, there is need to strengthen the relationship between project staff and participants. The overnight Spring Conference created a strong bond between staff and participants, as well as participants with each other. Instead of exploiting this positive relationship, the 2-day drive-in Summer Conference, although effective in dissemination of information, was too short and the relationship weakened. It is proposed that the summer conference be eliminated and in its place 4 - 6 late afternoon-evening workship dinner meetings be held at Queens College during the Fall semester. In this way, the bonds that were constructed in the Spring would be strengthened in the Fall, rather than weakened. Perhaps, one result would be a different view of the role of the consultant, while another would be an extension of the willingness for school districts to make a joint effort to meet common problems.

The Newsletter was well received and is currently distributed to some 800 educators, including all secondary schools in Queens, Nassau and Suffolk Counties. The Secondary Education Department at Queens College is considering making this publication a permanent one, as it seems to be fulfilling an important local need. It enables dissemination to become a continuous process.

As indicated earlier, a change in the format of the summer conference will be organized in order to maintain the momentum built by the overnight conference. A series of evening dinner workshop meetings at Queens College will replace the summer drive-in conference. It is expected that the change will also affect the willingness of school districts to take better advantage of the consultant field visits.

TECHNICAL APPENDICES

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APPENDIX I

The scores given each of the workshop leaders were tabulated with means and standard deviations computed. These were divided into three sets of scores - the presentation given first, Session I, the presentation given second, Session II and the total rating combining both presentations. Table 1 represents the results of these tabulations.

TABLE 1:

Summary of Ratings for Each Workshop Leader on a Twenty Item Evaluation Form.

		SESSION I	SESSION II	TOTAL
Hoffman	$\bar{X}$	2.93	2.00	2.47
	sd	1.49	1.17	1.34
Engelmeyer	$\bar{X}$	3.65	2.13	2.89
	sd	1.53	1.29	1.41
Schulte	$\bar{X}$	4.05	3.89	3.97
	sd	1.68	1.80	1.74
Stopa	$\bar{X}$	6.10	3.19	4.64
	sd	2.08	1.46	1.80
Total	$\bar{X}$	4.05	2.87	3.46
	sd	1.98	1.66	1.83

These data were analyzed for significant differences between the mean ratings given each of the leaders on the twenty item questionnaires. A series of t-tests for the differences between means were performed pairing each leader with every other leader. In each pairing, n=20 (the number of questions) with the total degrees of freedom for the test (dof = 38). All tests were performed at $\alpha = 5\%$ with $t_c = 1.68$. Table 2 summarizes the results of these tests.

Table 2.

T-values for the Difference Between the Mean Ratings given Each Workshop Leader

	SESSION I	SESSION II	TOTAL
H-E	t = 1.49 .05<p<.1	t = .31 p>.3	t = .96 .12<p<.2
H-Sc	t = 2.23* .01<p<.025	t = 2.46* p=.01	t = 3.44* p<.005
H-St	t = 5.53* p<.005	t = 4.49* p<.005	t = 2.17* .01<p<.025
E-Sc	t = .80 .2<p<.25	t = 3.56* p<.005	t = 3.05* p<.005
E-St	t = 4.25* p<.005	t = 2.44* .01<p<.02	t = 4.33* p<.005
Sc-St	t = 3.42 p<.005	t = 1.34* .05<p<.1	t = 1.20 .1<p<.125

* Reversal of rank for session II

$n_1 = n_2 = 20$ d o f = 38

* significant at = .05

The results of these tests indicate that the conference participants judged Hoffman's and Engelmeyer's presentations most positively with no significant difference between the two in total rating. The difference between their respective ratings was greater in the first session but was still not significant at the 0.05 level.

The tests comparing Schulte and Stopa again show no significant differences in the total. There is, however, a marked change taking place between session I and session II presentations. In accounting for this change one can look at the presentations rather than the ratings. Mr. Stopa, who was a last minute substitution into the program to replace a speaker who cancelled two days prior to the conference, radically changed his presentation between session I and session II. This change in the type of materials discussed and in the program described made a great change in the rating given Mr. Stopa. This change was so great that it produced a reversal in the relative rank of Stopa and Schulte and yielded a difference between the two that was almost significant at the .05 level.

It is a matter of conjecture whether Mr. Stopa's overall rating would have been significantly better if both session I and session II had dealt with the same material. As presented, however, the tests indicate that while Hoffman and Engelmeyer did not differ significantly and Stopa and Schulte did not differ significantly, both Hoffman and Engelmeyer had significantly higher ratings than either Schulte or Stopa.

APPENDIX II

Bartlett's test of sphericity was performed upon an 8 variable correlation matrix consisting of 7 conference evaluation questionnaire items plus the variable of "position in school," where Teacher was coded 1, Supervisor was coded 2, and Administrator was coded 3. Chi Square was significant beyond the .01 level (χ^2 =60.5, df=28) thus permitting rejection of the hypothesis that the matrix consists of a set of uncorrelated elements.

These results permitted the application of a factor analytic approach to the analysis of these data, even though there were a relatively small number of subjects (N = 28). Principal Factoring with Iteration, SPSS PA2, was applied. Squared multiple correlation was used as the estimate of communality. In this procedure, the iterative processes replace the diagonal elements with new estimates of communality, representing the variances accounted for by the reduced matrix. When differences between two successive communality estimates are negligible, the procedure terminates. Varimax rotation was then applied to the number of components having eigen values greater or equal to 1.0. Only variables having loadings of +/-.30 or more were taken into account in the interpretation.

Results

Three factors met the criteria for rotation. These three factors accounted for 69.1% of the total variance. There were 12 loadings with an absolute value of .30 or greater; 6 on the first factor and 3 each on the two succeeding factors. Four variables produced significant loadings on two factors, the remaining 4 variables produced loadings on one factor.

Factor One

Factor One may be interpreted at The Major Components of Overall Participant Satisfaction with the Workshop. Factor One has its highest loading variable seven, the overall evaluation of the conference (.85). Variable two, the contribution to overall satisfaction made by holding the conference away from an institutional setting was quite substantial (.83).

Having the participants remain together proved to have mixed effects upon the participants evaluations. Item 3, which tapped respondents assessment of the contribution made by having stayed together during the conference loaded .60 on Factor One and .53 on Factor Three. This is interpreted to mean that while there were aspects of working together over a protracted period of time that were perceived as contributing to the overall satisfaction of participants with the workshop, some participants seem to have experienced greater satisfaction than others, satisfaction

unrelated to the overall evaluation of the workshop. This issue will be elaborated upon in the discussion of Factor Three.

Variable 4, the idea of a team composed of a teacher, supervisor and administrator from the same district, was an important component of overall satisfaction loading .39 on Factor One.

Having the conference take place during a school week--thus providing participants with a break in routine--was of some importance in overall satisfaction, loading .34 on Factor One.

Last, having resource personnel available before and after the workshops made a significant contribution to overall satisfaction, loading .31 on the first factor.

Over half (56.2%) the common factor variance was accounted for by Factor One. (Such a high proportion of common factor variance ought to be expected when column variance is maximized, as it is in Verimax rotation.)

Factor Two

Factor Two has been interpreted as Satisfaction Between and Among Consultants and Participants. Factor Two accounts for 29.6% of the common factor variance and consists of sources of satisfaction independent of overall satisfaction with the conference. The highest loading on this factor, .79, is on Item 5, the item tapping

the contribution of informal discussion sessions among participants, and consultants.

Item 6 which has a significant loading on Factor One is a doublet which has its highest loading, .60, on Factor Two. The only other variable that had a significant loading on this factor was also a doublet, Item 4, the team approach, loading .39 on Factor One but having a higher loading, .48, on Factor Two.

These results suggest that respondents made a distinction between those aspects of the workshop over which direct control could be exercised, such as scheduling and setting, and evaluations of the satisfactions that proceeded from interactions between and among consultants and participants. The Factor Analysis reflects the complexity of their views since all the variables that have a significant loading on this factor also share some variance with another factor. For example, adoption of the team idea is an administrative decision which contributed to their overall satisfaction with the conference but inevitably lead to personal interactions which, while valued, were seen as independent of direct administrative control; thus were evaluated along with other sources of satisfaction such as the contribution of informal discussions which were interactive and spontaneous in nature.

Factor Three

Factor Three is interpreted to be Satisfaction with Informal Interactions Relative to Organizational Status. Factor Three accounts for 14.2% of the common factor variance. This small, but revealing factor is defined by three variables, two of which are doublets, the contribution of remaining together (.53), the status of the individual, (.52), and the contribution of informal discussion, (.48).

It seems reasonably clear that supervisors and administrators valued these interactions more highly than did teachers, perhaps this difference in valuation may be attributable to a greater sense of ease that comes from feeling that one's comments are not being judged by supervisors. This was the only factor in which the position variable contributed substantial variance.

Inspection of the evaluation questionnaires of the teachers, supervisors and administrators supports the interpretation that while generally highly valued, greater satisfaction with informal interactions was to be found among supervisors and administrators than teachers. Further, no distinction can be made between supervisors' and administrators' satisfaction with these interactions. This suggests that the critical status distinction exists between regular teachers and "others", in this case both administrators and supervisors.

Table 2

Conference Evaluation Questionnaire:
Salient Loadings on Rotated Factor
Matrix

Questionnaire Items	Factor I	Factor II	Factor III
1. Occured during week rather than weekend	.34		
2. Removed from school setting	.83		
3. Participants remained together	.59		.53
4. Team of Teacher/Super/Admin.	.39	.48	
5. Informal discussion sessions		.79	.48
6. Resource personnel were available	.31	.57	
7. Overall evaluation of conference	.85		
8. Position in school			.52

Salient variables are defined as those having loadings of +/- .30 or greater.

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